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(Reviewed and Accepted for Publication)

LIGHTNING REFERENCE BIBLIOGRAPHY 1950-1960

AIEE Working Group of the Lightning and Insulation Subcommittee
of the
AIEE Transmission and Distribution Committee

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For personnel of the AIEE Working Group of the Lightning and Insulation Subcommittee, see page 1 of text.

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LIGHTNING REFERENCE BIBLIOGRAPHY 1950-1960

AIEE Committee Report

SUMMARY

Supplementing the AIEE Lightning Reference Book and Lightning Reference Bibliography 1936-1949, the present work lists 452 references on lightning and related subjects. New sections included are "Books and Bibliographies" and "Switching Surges". The objective has been a useful document for American Transmission and Development engineers rather than a complete listing of domestic and foreign references. For the engineer wanting more complete references, the Supplement to Lightning Reference Bibliography 1950-1960 has been prepared and placed in the Engineering Societies Library. It contains an additional 571 references classified mostly as follows: (1) foreign language 58%, (2) foreign periodicals in English 22%, (3) cloud physics and meteorology 11%. The Supplement can be obtained from the library for the cost of copying it.

FOREWORD

In 1937, the AIEE Lightning and Insulator Subcommittee published the AIEE Lightning Reference Book in which were reproduced more than 200 of the important papers on lightning and lightning protection published in English during the period 1918-1935. With a view to the publication of a second such book, the Subcommittee in 1944 began to review papers published after 1935. By 1945, it was found that the costs of publication were prohibitive and the project for the publication of a Second AIEE Lightning Reference Book was dropped. The review was continued and in April 1950 Lightning Reference Bibliography 1936-1949 was printed as AIEE Publication S-37. It lists about 750 articles or books, 50 periodicals searched, and the names of 550 authors.

The present bibliography is an extension of Publication S-37 for the years 1950-60 inclusive. Substantially the same arrangement has been maintained but it has not been considered important to list all the references submitted or to review all listed publications completely. The objective has been a useful rather than a complete document for American engineers with all the important and available American literature and a sampling of foreign references. As a result, approximately one half the references for which synopsis cards were prepared have been included. Subject sections on "Books and Bibliographies" and "Switching Surges" have been added. Switching surges were included because of their effects on lightning arresters and because they are important in determining insulation levels, particularly at the highest operating voltages. AIEE references are given as page numbers in the annual Transactions. For those who use the bimonthly Transactions, Table I has been included to indicate the bimonthly issue for a given page number.

SUBJECT SECTION

1. Lightning Arresters and Other Protective Devices
2. Books and Bibliographies
3. Cables and Communications
4. Circuit Breakers and Switches
5. Co-ordination of Insulation
6. Distribution
7. Ground Wire and Counterpoise
8. Grounding
9. Impulse Testing
10. Lightning Measurements
11. Lightning and Surge Theory
12. Natural Lightning Phenomena
13. Operating Experience
14. Protection of Building and Persons
15. Switching Surges
16. Transformers
17. Transmission

The personnel of the Working Group of the Lightning and Insulator Subcommittee of the AIEE Committee on Transmission and Distribution are P. H. McAuley, chairman, J. G. Anderson, C. E. Corey, C. M. Ferguson, B. E. Kingsbury, J. T. Lusignan, A. C. Miner, and E. R. Whitehead.

TABLE I

First Page Numbers AIEE Bimonthly Transactions 1952-1960

		1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Part I	Mar.		1	1	1	1	1	1	1	1	1
Communications & Electronics	May	129+	89	97	145	113	93	129	81	81	81
	July	175	217	193	289	257	241	257	217	193	193
	Sept.	239	345	289	401	373	373	401	297	353	
	Nov.	303	505	417	561	501	497	545	457	449	
	Jan.*	383	714	577	673	625	677	785	729	625	
Part II	Mar.		1	1	1	1	1	1	1	1	1
Applications & Industry	May	109+	49	65	65	49	49	49	49	41	41
	July	145	145	97	129	125	101	113	129	121	113
	Sept.	185	209	161	209	189	165	177	177	233	
	Nov.	225	273	225	273	253	237	289	273	305	
	Jan.*	353	369	353	345	317	345	465	369	433	
Part III	Apr.	539	81	97	1	1	1	1	1	1	1
Power Apparatus & Systems	Jun.	none	353	417	289	249	137	161	129	129	121
	Aug.	567	593	737	545	505	393	417	417	353	345
	Oct.	743	849	1041	801	793	665	657	673	581	
	Dec.	983	1073	1329	1057	1049	849	897	977	789	
	Feb.*	1	1	1553	1313	1257	1225	1169	1457	1037	

+Dated April 1952.
*These sections are dated the following year in each case. For example, the Feb. 1960 Power Apparatus & Systems issue is part of the 1959 Transactions, beginning with page 1457.

For 1950 and 1951 the Transactions appeared in 1 volume of 2 parts for each year. First page numbers of Part 2 are 671 and 1121, respectively.

LIST OF PERIODICALS AND ABBREVIATIONS

AIEE	Transactions, American Institute of Electrical Engineers, New York Part I Communications & Electronics Part II Applications & Industry Part III Power Apparatus & Systems
ASEA J.	ASEA Journal, Vasteras, Sweden
BEAMA	BEAMA Journal, London, England
Bell Labs. Rec.	Bell Laboratories Record, New York
Bell Sys. Tech. J.	Bell System Technical Journal, New York
Brown Boveri Review	Brown Boveri Review, London, England
Bull. Acad. Sci. USSR	Bulletin of the Academy of Sciences USSR, Moscow
Bull. A.S.E.	Bulletin, Association Suisse des Electriciens, Zurich, Switzerland
Bull. S. B. E.	Bulletin of the Societe Belge des Electriciens, Brussels
Bull. S. E. V.	Bulletin, Schwerzerischen Elektrotechnischen Vereins, Zurich, Switzerland
Bull. S. F. E.	Bulletin, Societe Francaise des Electriciens, Malakoff, Seine, France
CIGRE Proc.	Proceedings, Conference Internationale des Grands Reseaux Electriques, Paris, France
Elec. Engrg.	Electrical Engineering, AIEE, New York
Elec. Light & Power	Electric Light and Power, Chicago, Illinois
Elec. News & Engrg.	Electrical News and Engineering, Toronto, Canada
Elec. Review	Electrical Review, London, England
Elec. Times	Electrical Times, London, England
Elec. West	Electrical West, Los Angeles, California
Elec. World	Electrical World, New York
Electronics	Electronics, New York
Elektrichestvo	Elektrichestvo, Moscow
E. u M.	Elektrotechnik und Maschinenbau, Vienna
Endeavour	Endeavour, London, England

E. T. Z.	Elektrotechnische Zeitschrift, Berlin
Gen. Elec. Rev.	General Electric Review, Schenectady
J. App. Phys.	Journal of Applied Physics, New York
J. Frank. Inst.	Journal of the Franklin Institute, Philadelphia, Pennsylvania
J. Geophys. Res.	Journal of Geophysical Research, Washington, D.C.
J. Nat. Bur. Stds.	Journal of Research, National Bureau of Standards, Washington, D.C.
J. Sci. Instr.	Journal of Scientific Instruments, London
Nature	Nature, London, England
Phys. Rev.	Physical Review, New York
Proc. I.R.E.	Proceedings, Institute of Radio Engineers, New York
Proc. I.E.E.	Proceedings, Institution of Electrical Engineers, London, England (Journal also)
Proc. Phys. Soc.	Proceedings, Physical Society, London, England
Proc. Royal Soc.	Proceedings, Royal Society of London, London, England
Quart. J. Met. Soc.	Quarterly Journal of Royal Meteorological Society, London, England
Rev. Sci. Instr.	Review of Scientific Instruments, New York
Rev. Gen. Elec.	Revue Generale de l'Electricite, Paris, France
Science	Science, Washington, D.C.
The Engrg. Jour.	The Engineering Journal, Montreal, Canada
Trans. So. Africa I.E.E.	Transactions, South African Institute of Electrical Engineers, Johannesburg, South Africa
Trans. & Dist.	Transmission and Distribution, Orange, Connecticut
V.D.E.	Fachberichte der XXV Jahresversammlung des Verbandes Deutsche Elektrotechniker, Frankfurt, Germany
West. Engr.	Westinghouse Engineer, Pittsburgh, Pennsylvania

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